

AMENDMENTS TO SPECIFICATION

Page 1, lines 3-5:

The present invention relates to a microfluid driving device, ~~especailly~~ especially to a non-contact pneumatic microfluid driving device comprising an external servo system and a chip carrying a microfluid driving platform.

Page 1, lines 7-13:

The “biochip” which is able to automatically operate the nucleic acid sample processing and the testing of base series has been developing in all ~~counties~~ countries in the world. In these biochips, the microfluid driving system that drives microfluid that contains samples of ~~biochimiical~~ biochemical agents to move inside microfluidic channels is one of the most important equipments. The question of how to easily control fluid movement and avoid the cross pollution of the sample or the biochemical agents with the driving system, as become a question of interest.

Page 3, lines 5-8:

The on-chip electrokinetic micropump is a non-mechanical micropump. Inside the pump there ~~is~~ are no moveable elements. Operations of such a micropump may be carried on by electro-osmosis (EO), electro-hydrodynamic (EHD) or electrophoresis (EP).

Page 5, lines 6-16:

When the microfluid is driven by an external servo system, ~~it~~ there is no need to provide any active element in the chip containing the microchannel. Such a chip may be prepared under a lower cost easily. The external servo system is ~~no~~ not directly connected to the samples or the reagents and may be used repeatedly. The problem is the interface between the servo system and the chip, the “system-to-chip interface”. How to connect transmission pipes of carrier fluids, which are in normal sizes, to the microchannels of the chip, which are ~~in~~ miniature sized in size, will become a task to be achieved by using a series of micro fabrication technologies. If the

problem of the system-to-chip interface can be solved, the combination of an external servo system and a disposable biochip which contains no active components will be highly feasible in the preparation of the microfluid driving system.

Page 10, lines 11-19:

The microfluid driving platform 10 may be fabricated with the microfabrication technology. Fig. 4 shows the flow chart of the preparation of the microfluid driving platform 10. As shown in this figure, at step (a), a silicon ~~chip~~chip is first processed in ~~an~~a furnace to grow a thermal oxide layer to function as a mask for further deep etching. At step (b), the lithographic process is applied and at step (c), the oxide etching process is applied to form the pattern of the microchannel. At step (d), the substrate is deep etched to a desired depth with the ICP (inductively coupled plasma) technology. At step (e), the substrate is anodic bonded with a pyrex glass wafer and diced into a desired size.